

# INDIANA PROJECT WET



## State Science Standards Correlation to Activities

Please use the following correlations of the Project WET activities to the Indiana State Science Standards for your planning needs.

Project WET provides workshops throughout the state, and they can be designed to meet your grade level or group needs.

Correlations will be available on line at:

[projectwet.in.gov](http://projectwet.in.gov)

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### **KINDERGARTEN THRU SECOND GRADE**

SPECIAL THANKS TO:

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Funded by :  
LARE  
Lake and River Enhancement / DNR

Final copy  
May 2004

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## Project WET Activities correlated to the Indiana State Science Standards

Page	Project WET Activity
3	<b>Check It Out!</b> Explore a variety of performance assessment strategies
7	<b>Idea Pools</b> Become familiar with pre-assessment strategies
9	<b>Let's Work Together</b> Use cooperative learning strategies
12	<b>Water Action</b> Propose, analyze, and implement action strategies
19	<b>Water Log</b> Assess student learning through a journal of portfolio
25	<b>Adventures in Density</b> Experiment with density and explore examples of density in classic literature
30	<b>H<sub>2</sub>Olympics</b> Compete in a water Olympics to investigate adhesion and cohesion
35	<b>Hangin' Together</b> Mimic hydrogen bonding in surface tension, ice formation, evaporation, and solutions
43	<b>Is There Water on Zork?</b> Test the properties of water
47	<b>Molecule in Motion</b> Simulate molecular movement in water's three states
50	<b>Water Match</b> Match water picture cards and discover the three states of water
54	<b>What's the Solution</b> Solve a crime while investigating the dissolving power of water
63	<b>Aqua Bodies</b> Estimate the amount of water in a person, a cactus, or a whale
66	<b>Aqua Notes</b> Sing to discover how the human body uses water
72	<b>Let's Even Things Out</b> Demonstrate osmosis and diffusion
76	<b>Life Box (The)</b> Discover the elements essential to life
79	<b>Life in the Fast Lane</b> Explore Temporary wetlands
85	<b>No Bellyachers</b> Show how pathogens are transmitted by water by playing a game of tag
89	<b>People of the Bog</b> Construct a classroom bog
93	<b>Poison Pump</b> Solve a mystery about a waterborne disease
99	<b>Salt Marsh Players</b> Role-play organisms adapted to life in a salt marsh
107	<b>Super Sleuths</b> Search for others who share similar symptoms of a waterborne disease
116	<b>Thirsty Plants</b> Demonstrate transpiration and conduct a field study
122	<b>Water Address</b> Analyze clues to match organisms with water-related adaptations
129	<b>Branching Out!</b> Construct a watershed model
133	<b>Capture, Store, and Release</b> Use a household sponge to demonstrate how wetlands get wet and how they contribute to a watershed
136	<b>Get the Ground Water Picture</b> Create an "earth window" to investigate ground water systems
144	<b>Geyser Guts</b> Demonstrate the workings of a geyser
150	<b>Great Stony book (The)</b> Create layers of buried fossils and read a great stony book
155	<b>House of Seasons (A)</b> Create a collage that peeks through a "window" to reveal the role of water in each season
157	<b>Imagine!</b> Imagine a water molecule on its water journey
161	<b>Incredible Journey (The)</b> Simulate the movement of water through Earth's systems
166	<b>Just Passing Through</b> Mimic the movement of water down a slope
171	<b>Old Water</b> Create a mural that relates events to the age of Earth, water, and life

Page	Project WET Activity
174	<b>Piece It Together</b> Explore global climates and their influence on lifestyles
182	<b>Poetic Precipitation</b> Simulate cloud formation and express feelings toward precipitation through poetry
186	<b>Rainy -Day Hike</b> Explore schoolyard topography and its effect on the watershed
191	<b>Stream Sense</b> Develop sensory awareness of a stream
196	<b>Thunderstorm (The)</b> Simulate the sounds of thunderstorm and create precipitation maps
201	<b>Water Models</b> Construct models of the water cycle and adapt them for different biomes
206	<b>Wet Vacation</b> Plot data to determine weather patterns and design appealing travel brochures
212	<b>Wetland Soils in Living Color</b> Classify soil types using a simple color key
219	<b>A-maze-ing Water</b> Negotiate a maze to investigate nonpoint source pollution
223	<b>Color Me a Watershed</b> Interpret maps to analyze changes in a watershed
232	<b>Common Water</b> Demonstrate that water is a shared resource
238	<b>Drop in the Bucket (A)</b> Calculate the availability of fresh water on Earth
242	<b>Energetic Water</b> Design devices to make water do work
246	<b>Great Water Journeys</b> Use clues to track great water journey of plants, people, and other animals on a map
254	<b>Irrigation Interpretation</b> Model different irrigation systems
260	<b>Long Haul (The)</b> Haul water to appreciate the amount of water used daily
262	<b>Nature Rules!</b> Write news stories based on natural, water-related disasters
267	<b>Sum of the Parts</b> Demonstrate nonpoint source pollution
271	<b>Water Meter</b> Construct a water meter and keep track of personal water use
274	<b>Water Works</b> Create a web of water users
279	<b>Where Are the Frogs</b> Run a simulation and experiment to understand the effects of acid rain
289	<b>AfterMath</b> Assess economic effects of water-related disasters
293	<b>Back to the Future</b> Analyze streamflow data to predict floods and water shortages
300	<b>CEO (The)</b> Become a Chief executive Officer (CEO) and learn about business/corporate water management challenges
303	<b>Dust Bowls and Failed Levees</b> Witness, through literature, the effects of drought and flood on human populations
307	<b>Every Drop Counts</b> Identify and implement water conservation habits
311	<b>Grave Mistake (A)</b> Analyze data to solve a ground water mystery
316	<b>Humpty Dumpty</b> Simulate a restoration project by putting the pieces of an ecosystem back together
322	<b>Macroinvertebrate Mayhem</b> Illustrate, through a game of tag, how macroinvertebrate populations indicate water quality
328	<b>Money Down the Drain</b> Observe and calculate water waste from a dripping faucet
333	<b>Price is Right (The)</b> Analyze costs for building a water development project
338	<b>Pucker Effect (The)</b> Simulate ground water testing to discover the source of contamination
344	<b>Reaching Your Limits</b> "Limbo" to learn basic water quality concepts and standards development
348	<b>Sparkling Water</b> Develop strategies to clean wastewater
353	<b>Super Bowl Surge</b> Develop a strategy to accommodate the demands on a wastewater treatment plant

Page	Project WET Activity
360	<b>Wet-Work Shuffle</b> Sequence the water careers involved in getting water to and from the home
367	<b>Choices and Preferences, Water Index</b> Develop a "water index" to rank water uses
373	<b>Cold Cash in the Icebox</b> Create a mini-insulator to prevent an ice cube from melting
377	<b>Dilemma Derby</b> Examine differing values in resolving water resource management dilemmas
382	<b>Easy Street</b> Compare quantities of water used in the late 1800s to the present
388	<b>Hot Water</b> Debate water issues
392	<b>Pass the Jug</b> Simulate water rights policies with a "jug" of water
397	<b>Perspectives</b> Identify values to solve water management issues
400	<b>Water: Read All About It!</b> Develop a Special Edition on water
403	<b>Water Bill of Rights</b> Create a document to guarantee the right to clean and sustainable water resources
407	<b>Water Concentration</b> Play concentration and discover how water use practices evolve
413	<b>Water Court</b> Participate in a mock court to settle water quality and quantity disputes
421	<b>Water Crossings</b> Simulate a water crossing and relate the historical significance of waterways
425	<b>What's Happening?</b> Conduct a community water use survey
429	<b>Whose Problem Is It?</b> Analyze the scope and duration of water issues to determine personal and global significance
435	<b>Raining Cats and Dogs</b> Discover how water proverbs vary among culture and climates
442	<b>Rainstick (The)</b> Build an instrument that imitates the sound of rain
446	<b>Water Celebration</b> Organize a water celebration with activities from this guide
450	<b>wAteR in motion</b> Create artwork that simulates the movement and sound of water in nature
454	<b>Water Message in Stone</b> Replicate ancient rock art, creating symbols of water
457	<b>Water Write</b> Explore feelings about and perception of water topics through writing exercises
460	<b>Wish Book</b> Compare recreational uses of water in the late 1800s and the present

# Kindergarten

	The Nature of Science and Technology	Scientific Thinking	The Physical Setting	The Living Environment	The Mathematical World	Common Themes
<b>ACTIVITY</b>						
A-Maze-ing Water (219)	K.1.1 K.1.2	K.2.2	K.3.1 K.3.2			K.6.1
Aqua Bodies (63)	K.1.1 K.1.2	K.2.2	K.3.1	K.4.1		
Branching Out! (129)	K.1.1 K.1.2	K.2.2	K.2.3			
Choices & Preferences (367)	K.1.1	K.2.2				
Common Water (232)	K.1.1 K.1.2	K.2.2				K.6.1
A Drop in the Bucket (238)	K.1.1 K.1.2	K.2.1 K.2.2			K.5.1	
A House of Seasons (155)	K.1.1 K.1.2	K.2.2				K.6.1
Idea Pools (7)	K.1.1	K.2.1 K.2.2	K.3.1			K.6.1
Irrigation Interpretation (254)	K.1.1 K.1.2 K.2.2					
Let's Work Together (9)	K.1.1 K.1.2 K.2.2					K.6.1
The Life Box (76)	K.1.1	K.2.2				
The Long Haul (260)	K.1.1 K.1.2	K.2.2	K.3.2			
Molecules in Motion (47)	K.1.1	K.2.2	K.3.2			
Pass the Jug (392)	K.1.1					
The Thunderstorm (196)	K.1.1 K.1.2	K.2.1 K.2.2	K.3.2			K.6.1
Water Address (122)	K.1.1	K.2.2	K.3.2	K.4.1 K.4.2		K.6.1
wAteR in moTion (450)	K.1.1	K.2.2	K.3.2			K.6.1
Water Log (19)	K.1.1	K.2.2	K.3.1			
Water Match (50)	K.1.1 K.1.2					K.6.1
Water Write (457)	K.1.1	K.2.2	K.3.1			K.6.1
Wet-Work Shuffle (360)	K.1.1 K.1.2	K.2.2	K.3.1	K.4.1		
What's Happening? (425)	K.1.1 K.1.2	K.2.1				

**First Grade**

	The Nature of Science and Technology	Scientific Thinking	The Physical Setting	The Living Environment	The Mathematical World	Common Themes
<b>ACTIVITY</b>						
A-Maze-ing Water (219)	1.1.2	1.2.7	1.3.4			1.6.1 1.6.2
Aqua Bodies (63)	1.1.2 1.1.3	1.2.1 1.2.7		1.4.1		1.6.1
Branching Out! (129)	1.1.2	1.2.7	1.3.4			1.6.1
Check It Out! (3)	1.1.1, 1.1.2 1.1.3, 1.1.4	1.2.1, 1.2.6 1.2.7	1.3.4	1.4.4	1.5.2	1.6.1 1.6.2
Choices & Preferences (367)	1.1.1	1.2.7		1.4.4	1.5.1 1.5.2	
Cold Cash in the Icebox (373)	1.1.2	1.2.1 1.2.7	1.3.1	1.4.4		1.6.2
Common Water (232)	1.1.1, 1.1.2 1.1.4	1.2.7		1.4.4		
A Drop in the Bucket (238)	1.1.2 1.1.3 1.1.4	1.2.1	1.3.1	1.4.4	1.5.2	1.6.1
A House of Seasons (155)	1.1.2	1.2.7	1.3.1 1.3.3			1.6.2
Idea Pools (7)	1.1.2	1.2.7			1.5.3	
Irrigation Interpretation (254)	1.1.2 1.1.3	1.2.6 1.2.7		1.4.4		
Let's Work Together (9)	1.1.2 1.1.4	1.2.6	1.3.4			1.6.2
The Long Haul (260)	1.1.2	1.2.6 1.2.7			1.5.2	
Molecules in Motion (47)	1.1.1 1.1.2	1.2.6 1.2.7	1.3.1, 1.3.2 1.3.3			1.6.2
Pass the Jug (392)	1.1.2	1.2.6		1.4.4		1.6.2
Poetic Precipitation (182)	1.1.1 1.1.2 1.1.3	1.2.6 1.2.7	1.3.4	1.4.4		1.6.2
Rainy-Day Hike (186)	1.1.1 1.1.2	1.2.6	1.3.3 1.3.4		1.5.3	1.6.2
Stream Sense (191)						
The Thunderstorm (196)	1.1.1 1.1.2	1.2.1 1.2.6 1.2.7	1.3.1 1.3.4		1.5.1 1.5.2	1.6.1
Water Address (122)	1.1.1	1.2.6		1.4.3 1.4.4		1.6.2
wAteR in moTion (450)	1.1.1 1.1.2 1.1.4	1.2.1 1.2.6 1.2.7	1.3.2 1.3.4 1.3.5			1.6.1

	The Nature of Science and Technology	Scientific Thinking	The Physical Setting	The Living Environment	The Mathematical World	Common Themes
<b>ACTIVITY</b>						
Water Log (19)	1.1.1	1.2.6 1.2.7		1.4.4		1.6.2
Water Match (50)	1.1.1 1.1.2	1.2.6	1.3.1			1.6.2
Water Write (457)	1.1.1 1.1.2	1.2.6 1.2.7	1.3.1	1.4.1		1.6.2
Wet-Work Shuffle (360)	1.1.1	1.2.7		1.4.4		1.6.1
What's Happening? (425)	1.1.2 1.1.4	1.2.1 1.2.2 1.2.6			1.5.1 1.5.2	



**Second Grade**

	The Nature of Science and Technology	Scientific Thinking	The Physical Setting	The Living Environment	The Mathematical World	Common Themes
<b>ACTIVITY</b>						
A-Maze-ing Water (219)	2.1.1, 2.1.3 2.1.6	2.2.5	2.3.5		2.5.3 2.5.5	2.6.3
Aqua Bodies (63)	2.1.2, 2.1.3 2.1.6	2.2.5		2.4.3		
Branching Out! (129)	2.1.1 2.1.3	2.2.5	2.3.2		2.5.5	
Check It Out! (3)	2.1.1, 2.1.2 2.1.3, 2.1.4 2.1.5, 2.1.6	2.2.4 2.2.5	2.3.1 2.3.7	2.4.3	2.5.3 2.5.4 2.5.5	2.6.2 2.6.3
Choices & Preferences (367)	2.1.3 2.1.5	2.2.5		2.4.3	2.5.4	
Cold Cash in the Icebox (373)	2.1.1 2.1.2 2.1.3, 2.1.6	2.2.3 2.2.5	2.3.5		2.5.1	2.6.3
Common Water (232)	2.1.1 2.1.3, 2.1.6	2.2.3 2.2.5	2.3.4	2.4.3	2.5.1 2.5.2	2.6.3
A Drop in the Bucket (238)	2.1.2 2.1.3 2.1.6	2.2.3 2.2.5		2.4.3	2.5.1 2.5.2	
A House of Seasons (155)	2.1.3	2.2.5	2.3.1 2.3.2			
Idea Pools (7)	2.1.3 2.1.4 2.1.5	2.2.5				
Irrigation Interpretation (254)	2.1.1, 2.1.2 2.1.3, 2.1.6	2.2.3 2.2.5		2.4.3	2.5.3 2.5.6	
Let's Work Together (9)	2.1.1, 2.1.2 2.1.3, 2.1.4 2.1.5, 2.1.6	2.2.5	2.3.1	2.4.3	2.5.2	2.6.2
The Life Box (76)	2.1.1	2.2.5		2.4.3		
The Long Haul (260)	2.1.1, 2.1.3 2.1.5	2.2.1 2.2.2	2.3.7		2.5.2	
Molecules in Motion (47)	2.1.1 2.1.3	2.2.5	2.3.5			2.6.3
Pass the Jug (392)	2.1.4 2.1.5	2.2.3		2.4.3 2.4.8	2.5.2, 2.5.4 2.5.5	
Poetic Precipitation (182)	2.1.3 2.1.5	2.2.5	2.3.1			
Rainy-Day Hike (186)	2.1.1, 2.1.3 2.1.5, 2.1.7	2.2.4 2.2.5	2.3.2, 2.3.5 2.3.7	2.4.5	2.5.5	2.6.1 2.6.2
The Thunderstorm (196)	2.1.1, 2.1.3 2.1.5, 2.1.7	2.2.1 2.2.5	2.3.2			
Water Address (122)	2.1.3 2.1.5	2.2.5	2.3.4	2.4.1 2.4.3 2.4.4		

	The Nature of Science and Technology	Scientific Thinking	The Physical Setting	The Living Environment	The Mathematical World	Common Themes
<b>ACTIVITY</b>						
wAteR in moTion (450)	2.1.1 2.1.2 2.1.3, 2.1.6	2.2.2 2.2.3 2.2.4, 2.2.5	2.3.7			2.6.2
Water Log (19)	2.1.3 2.1.4	2.2.5	2.3.1		2.5.5 2.5.6	2.6.1 2.6.3
Water Match (50)	2.1.1, 2.1.3 2.1.4, 2.1.5 2.1.6		2.3.1 2.3.5		2.5.3 2.5.6	2.6.1
Water Write (457)	2.1.1, 2.1.3 2.1.5	2.2.4 2.2.5				2.6.1
Wet-Work Shuffle (360)	2.1.3 2.1.7	2.2.4 2.2.5		2.4.8		
What's Happening? (425)	2.1.2 2.1.3 2.1.4 2.1.5	2.2.1 2.2.5			2.5.2	

# Kindergarten

## Standard 1

### The Nature of Science and Technology

*Students are actively engaged in beginning to explore how their world works. They explore, observe, ask questions, discuss observations\* and seek answers.*

#### Scientific Inquiry

K.1.1 Raise questions about the natural world.

**WET Activities (page):** 7, 9, 19, 47, 50, 63, 76, 122, 129, 155, 196, 219, 232, 238, 254, 260, 360, 367, 392, 425, 450, 457

#### The Scientific Enterprise

K.1.2 Begin to demonstrate that everybody can do science.

\*observation: gaining information through the use of one or more of the senses, such as sight, smell, etc.

**WET Activities (page):** 9, 50, 63, 129, 155, 196, 219, 232, 238, 254, 260, 360, 425

## Standard 2

### Scientific Thinking

*Students use numbers, pictures, and words when observing and communicating to help them begin to answer their questions about the world.*

#### Computation and Estimation

K.2.1 Use whole numbers\*, up to 10, in counting, identifying, sorting, and describing objects and experiences.

**WET Activities (page):** 7, 196, 238, 425

#### Communication

K.2.2 Draw pictures and write words to describe objects and experiences.

\*whole numbers: 0,1,2,3,etc.

**WET Activities (page):** 7, 9, 19, 47, 63, 76, 122, 129, 155, 196, 219, 232, 238, 254, 60, 360, 367, 450, 457

## Standard 3

### The Physical Setting

*Students investigate, describe, and discuss their natural surroundings. They begin to question why things move.*

K.3.1 Describe objects in terms of the materials they are made of such as clay, cloth, paper, etc.

**WET Activities (page):** 7, 19, 63, 219, 360, 457

## Forces of Nature

K.3.2 Investigate that things move in different ways such as fast, slow, etc.

**WET Activities (page):** 47, 122, 129, 196, 219, 260, 450

## Standard 4

### The Living Environment

*Students ask questions about a variety of living things and everyday events that can be answered through shared observations.*

#### Diversity of Life

K.4.1 Give examples of plants and animals.

**WET Activities (page):** 63, 122, 360

K.4.2 Observe plants and animals, describing how they are alike and how they are different in the way they look and in the things they do.

**WET Activities (page):** 122

## Standard 5

### The Mathematical World

*Students use shapes to compare objects and they begin to recognize patterns.*

#### Shapes and Symbolic Relationships

K.5.1 Use shapes — such as circles, squares, rectangles, and triangles — to describe different objects.

**WET Activities (page):** 238

## Standard 6

### Common Themes

*Students begin to understand how things are similar and how they are different. They look for ways to distinguish between different objects by observation.*

#### Models and Scale

K.6.1 Describe an object by saying how it is similar to or different from another object.

**WET Activities (page):** 7, 9, 50, 122, 155, 219, 232, 450, 457

## Standard 1

### The Nature of Science and Technology

*Students are actively engaged in exploring how the world works. They explore, observe, count, collect, measure, compare, and ask questions. They discuss observations and use tools to seek answers and solve problems. They share their findings.*

#### Scientific Inquiry

- 1.1.1 Observe, describe, draw, and sort objects carefully to learn about them.

**WET Activities (page):** 3, 19, 47, 50, 122, 182, 186, 196, 232, 360, 367, 450, 457

- 1.1.2 Investigate and make observations to seek answers to questions about the world, such as “In what ways do animals move?”

**WET Activities (page):** 3, 7, 9, 47, 50, 63, 129, 155, 182, 186, 196, 219, 232, 238, 254, 260, 373, 392, 425, 457

#### The Scientific Enterprise

- 1.1.3 Recognize that and demonstrate how people can learn much about plants and animals by observing them closely over a period of time. Recognize also that care must be taken to know the needs of living things and how to provide for them.

**WET Activities (page):** 3, 63, 182, 238

#### Technology and Science

- 1.1.4 Use tools, such as rulers and magnifiers, to investigate the world and make observations.

\*observation: gaining information through the use of one or more of the senses, such as sight, smell, etc.

**WET Activities (page):** 3, 232, 238, 425, 450

## Standard 2

### Scientific Thinking

*Students begin to find answers to their questions about the world by using measurements, estimation, and observation as well as working with materials. They communicate with others through numbers, words, and drawings.*

#### Computation and Estimation

- 1.2.1 Use whole numbers\*, up to 100, in counting, identifying, measuring, and describing objects and experiences.

**WET Activities (page):** 3, 63, 196, 238, 373, 425, 450

- 1.2.2 Use sums and differences of single digit numbers in investigations and judge the reasonableness of the answers.

**WET Activities (page):** 425

## Communication Skills

- 1.2.6 Describe and compare objects in terms of number, shape, texture, size, weight, color, and motion.

**WET Activities (page):** 3, 9, 19, 47, 50, 12, 182, 186, 196, 254, 260, 392, 425, 450, 457

- 1.2.6.1 Write brief informational descriptions of a real object, person, place, or event using information from observations.

**WET Activities (page):** 3, 7, 19, 47, 63, 129, 155, 182, 196, 219, 232, 254, 260, 360, 367, 373, 450, 457

## Standard 3

### The Physical Setting

*Students investigate, describe, and discuss their natural surroundings. They question why things move and change.*

#### The Earth and the Processes That Shape It

- 1.3.1 Recognize and explain that water can be a liquid or a solid and can go back and forth from one form to the other. Investigate by observing that if water is turned into ice and then the ice is allowed to melt, the amount of water is the same as it was before freezing.

**WET Activities (page):** 47, 50, 155, 196, 238, 373, 457

- 1.3.2 Investigate by observing and then describing that water left in an open container disappears, but water in a closed container does not disappear.

**WET Activities (page):** 47, 450

#### Matter and Energy

- 1.3.3 Investigate by observing and also measuring that the sun warms the land, air, and water.

**WET Activities (page):** 47, 155, 186

#### Forces of Nature

- 1.3.4 Investigate by observing and then describe how things move in many different ways, such as straight, zigzag, round-and-round, and back-and-forth.

**WET Activities (page):** 3, 9, 129, 182, 196, 219, 450

- 1.3.5 Recognize that and demonstrate how things near Earth fall to the ground unless something holds them up.

**WET Activities (page):** 450

## Standard 4

### The Living Environment

*Students ask questions about a variety of living things and everyday events that can be answered through observations. They become aware of plant and animal interaction. They consider things and processes that plants and animals need to stay alive.*

#### Diversity of Life

- 1.4.1 Identify when stories give attributes to plants and animals, such as the ability to speak, that they really do not have.

**WET Activities (page):** 63

#### Interdependence of Life

- 1.4.2 Observe and explain that animals eat plants or other animals for food.

**WET Activities (page):** 122

- 1.4.3 Explain that most living things need water, food, and air.

**WET Activities (page):** 3, 14, 122, 182, 232, 238, 254, 360, 367, 373, 392

## Standard 5

### The Mathematical World

*Students apply mathematics in scientific contexts. They begin to use numbers for computing, estimating, naming, measuring, and communicating specific information. They make picture graphs and recognize patterns.*

#### Numbers

- 1.5.1 Use numbers, up to 10, to place objects in order, such as first, second, and third, and to name them, such as bus numbers or phone numbers.

**WET Activities (page):** 3, 63, 196, 238, 373, 425, 450

- 1.5.2 Make and use simple picture graphs to tell about observations.

**WET Activities (page):** 3, 196, 28, 260, 367, 425

#### Shapes and Symbolic Relationships

- 1.5.3 Observe and describe similar patterns, such as shapes, designs, and events that may show up in nature, such as honeycombs, sunflowers, or shells. See similar patterns in the things people make, such as quilts, baskets, or pottery.

**WET Activities (page):** 7, 186

## Standard 6

### Common Themes

*Students begin to understand how things are similar and how they are different. They look for what changes and what does not change and make comparisons.*

#### Models and Scale

- 1.6.1 Observe and describe that models, such as toys, are like the real things in some ways but different in others.

**WET Activities (page):** 3, 63, 129, 196, 219, 238, 360, 450

#### Constancy and Change

- 1.6.2 Observe that and describe how certain things change in some ways and stay the same in others, such as in their color, size, and weight.

**WET Activities (page):** 3, 9, 19, 47, 50, 122, 155, 182, 186, 219, 373, 457



### Standard 1

#### The Nature of Science and Technology

*Students are actively engaged in exploring how the world works. They explore, observe, count, collect, measure, compare, and ask questions. They discuss observations\* and use tools to seek answers and solve problems. They share their findings.*

##### Scientific Inquiry

- 2.1.1 Manipulate an object to gain additional information about it.  
**WET Activities (page):** 3, 9, 47, 50, 76, 129, 186, 196, 219, 232, 254, 373, 450, 457
- 2.1.2 Use tools, such as thermometers, magnifiers, rulers, or balances, to gain more information about objects.  
**WET Activities (page):** 3, 9, 63, 238, 254, 373, 425, 450
- 2.1.3 Describe, both in writing and verbally, objects as accurately as possible and compare observations with those of other people.  
**WET Activities (page):** 3, 7, 9, 19, 47, 50, 63, 122, 129, 155, 182, 186, 196, 219, 232, 238, 254, 260, 360, 367, 373, 425, 450, 457
- 2.1.4 Make new observations when there is disagreement among initial observations.  
**WET Activities (page):** 3, 7, 9, 19, 50, 392, 425

##### The Scientific Enterprise

- 2.1.5 Demonstrate the ability to work with a team but still reach and communicate one's own conclusions about findings.  
**WET Activities (page):** 3, 7, 9, 50, 122, 182, 186, 196, 260, 367, 392, 425, 457

##### Technology and Science

- 2.1.6 Use tools to investigate, observe, measure, design, and build things.  
**WET Activities (page):** 3, 9, 50, 63, 219, 232, 238, 254, 373, 450
- 2.1.7 Recognize and describe ways that some materials, such as recycled paper, cans, and plastic jugs, can be used over again.  
\*observation: gaining information through the use of one or more of the senses, such as sight, smell, etc.  
**WET Activities (page):** 186, 196, 360

## Standard 2

### Scientific Thinking

*Students begin to find answers to their questions about the world by using measurement, estimation, and observation as well as working with materials. They communicate with others through numbers, words, and drawings.*

#### Computation and Estimation

- 2.2.1 Give estimates of numerical answers to problems before doing them formally.

**WET Activities (page):** 196, 260, 425

- 2.2.2 Make quantitative estimates of familiar lengths, weights, and time intervals and check them by measurements.

**WET Activities (page):** 260, 450

- 2.2.3 Estimate and measure capacity using cups and pints.

**WET Activities (page):** 232, 238, 254, 373, 392, 450

#### Manipulation and Observation

- 2.2.4 Assemble, describe, take apart, and/or reassemble constructions using such things as interlocking blocks and erector sets. Sometimes pictures or words may be used as a reference.

**WET Activities (page):** 3, 186, 360, 450, 457

#### Communication Skills

- 2.2.5 Draw pictures and write brief descriptions that correctly portray key features of an object.

**WET Activities (page):** 3, 7, 9, 19, 47, 63, 76, 122, 129, 155, 182, 186, 196, 219, 232, 238, 254, 360, 367, 373, 425, 450

## Standard 3

### The Physical Setting

*Students investigate, describe, and discuss their natural surroundings. They wonder why things move and change.*

#### The Earth and the Processes That Shape It

- 2.3.1 Investigate by observing and then describe that some events in nature have a repeating pattern such as seasons, day and night, and migrations.

**WET Activities (page):** 3, 9, 50, 155, 182

- 2.3.2 Investigate, compare, and describe weather changes from day to day but recognize, describe, and chart that the temperature and amounts of rain or snow tend to be high, medium, or low in the same months every year.

**WET Activities (page):** 7, 155, 186, 196

- 2.3.4 Investigate by observing and then describe how animals and plants sometimes cause changes in their surroundings.

**WET Activities (page):** 122, 232

#### Matter and Energy

- 2.3.5 Investigate that things can be done to materials, such as freezing, mixing, cutting, heating, wetting, etc., to change some of their properties and observe that not all materials respond in the same way.

**WET Activities (page):** 47, 50, 186, 219, 373

#### Forces of Nature

- 2.3.7 Investigate and observe that the way to change how something is moving is to give it a push or a pull.

**WET Activities (page):** 3, 186, 260, 450

### Standard 4

#### The Living Environment

*Students ask questions about a variety of living things and everyday events that can be answered through observations. They consider things and processes that plants and animals need to stay alive. Students begin to understand plant and animal interaction.*

#### Diversity of Life

- 2.4.1 Observe and identify different external features of plants and animals and describe how these features help them live in different environments.

**WET Activities (page):** 122

#### Interdependence of Life

- 2.4.3 Observe and explain that plants and animals both need to take in water, animals need to take in food, and plants need light.

**WET Activities (page):** 3, 9, 63, 76, 122, 232, 238, 254, 367, 392

- 2.4.4 Recognize and explain that living things are found almost everywhere in the world and that there are somewhat different kinds in different places.

**WET Activities (page):** 122

- 2.4.5 Recognize and explain that materials in nature, such as grass, twigs, sticks, and leaves, can be recycled and used again, sometimes in different forms, such as in birds' nests.

**WET Activities (page):** 186

#### Human Identity

- 2.4.8 Give examples of different roles people have in families and communities.

## **Standard 5**

### **The Mathematical World**

*Students apply mathematics in scientific contexts. They use numbers for computing, estimating, naming, measuring, and communicating specific information. They make picture and bar graphs. They recognize and describe shapes and patterns. They use evidence to explain how or why something happens.*

#### **Numbers**

- 2.5.1 Recognize and explain that, in measuring, there is a need to use numbers between whole numbers\*, such as 2½ centimeters.

**WET Activities (page):** 232, 238, 373

- 2.5.2 Recognize and explain that it is often useful to estimate quantities.

\*whole numbers: 0,1,2,3,etc.

**WET Activities (page):** 9, 76, 232, 238, 392, 425

#### **Shapes and Symbolic Relationships**

- 2.5.3 Observe that and describe how changing one thing can cause changes in something else such as exercise and its effect on heart rate.

**WET Activities (page):** 3, 19, 129, 219

#### **Reasoning and Uncertainty**

- 2.5.4 Begin to recognize and explain that people are more likely to believe ideas if good reasons are given for them.

**WET Activities (page):** 3, 367, 392

- 2.5.5 Explain that some events can be predicted with certainty, such as sunrise and sunset, and some cannot, such as storms. Understand that people aren't always sure what will happen since they do not know everything that might have an effect.

**WET Activities (page):** 3, 19, 129, 186, 219, 392

- 2.5.6 Explain that sometimes a person can find out a lot (but not everything) about a group of things, such as insects, plants, or rocks, by studying just a few of them.

**WET Activities (page):** 19, 50, 254

## **Standard 6**

### **Common Themes**

*Students begin to observe how objects are similar and how they are different. They begin to identify parts of an object and recognize how these parts interact with the whole. They look for what changes and what does not change and make comparisons.*

## Systems

- 2.6.1 Investigate that most objects are **made** of parts.

**WET Activity (page):** 19, 50, 186, 457

## Models and Scale

- 2.6.2 Observe and explain that models may not be the same size, may be missing some details, or may not be able to do all of the same things as the real things.

**WET Activity (page):** 3, 9, 186, 450

## Constancy and Change

- 2.6.2 Describe that things can change in different ways, such as in size, weight, color, age, and movement. Investigate that some small changes can be detected by taking measurements.

**WET Activity (page):** 3, 19, 47, 219, 232, 373